## A Remarkable New Chilean Genus of Grasshopper (Orthoptera, Crytacanthacrinae).

By Morgan Hebard, Philadelphia, Pennsylvania. (Plate XV.)

During a recent visit to the British Museum the author noted three specimens of a large and strikingly colored grasshopper, labelled simply "Chile", unlike any previously seen. The loan of these for study enables us to say that a new genus and species is represented, nearest *Litoscirtus insularis* Bruner, known only from Cerros Island, Lower California, but widely separated by many important characters.

These genera agree in general structure of head, short antennae, moderately hairy limbs, serrate dorsal carina of caudal femora and armament of caudal tibiae. Presence of apical spines on both dorsal margins of the caudal tibiae and fastigium declivent with lateral margins declivent cephalad are other important features in determining their position in the Cyrtacanthacrinae.

The new genus, Aucacris, combines with the above characters, the following. Frontal costa narrowed and moderately sulcate at juncture with fastigium. Pronotum with very low medio-longitudinal carina, which itself is finely longitudinally sulcate, interrupted by the transverse sulci and absent on the metazona; lateral carina indicated only by nodes; latero-caudal angles of lateral lobes distinctly flaring in dorsal aspect, rounded but distinctly angulate, rectangulate in male, obtuse-angulate in female. Tegmina reduced to very large pads. Caudal femora robust, genicular lobes rounded. Prosternal spine heavy, blunt conical, slightly transverse in male, more decidedly so in female.

Genotype,—Aucacris cumera new species.

The brilliant color of the caudal femora and tibiae and striking bands on the former constitute the most distinctive features of coloration.

Aucacris eumera new species. Plate XV, figure

This remarkable insect has the appearance of a large brachypterous Oedipodid, but examination shows that it belongs instead to the Cyrtacanthacrinae.

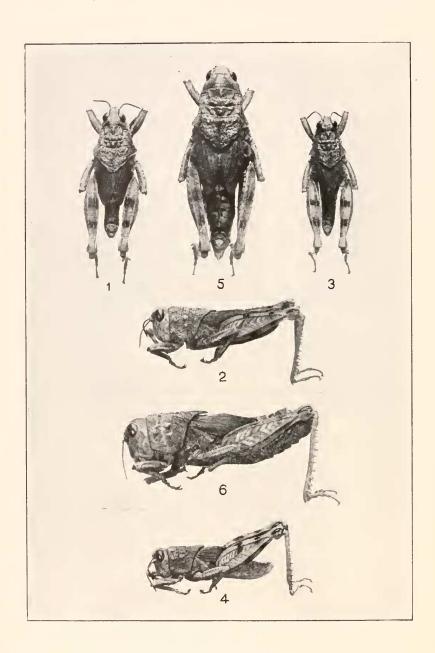
The closer relationship of *Litoscirtus insularis* Bruner is evident from a number of characters, though that genus super-

ficially suggests a greatly modified condition, with fully developed organs of flight, of the highly specialized type developed in the species of *Dracotettix* Bruner, the latter belongs to a very different phylum.

Type: &; Chile1. [British Museum.]

Size large, form robust. Antennae short and heavy, with (seventeen or eighteen) joints, of which all are very short except the ultimate, which is elongate conical. Fastigium declivent, rounding at slightly more than a right angle into the weakly oblique face; its lateral carinae distinct from just beyond the eyes, convergent and continued as those of the frontal costa; dorsal surface shallowly concave and smooth, back of which the occiput is feebly roughened and shows a very feeble, fine, medio-longitudinal carina. Eves of moderate size and prominence. Lateral ocelli very small, smaller than in Litoscirtus insularis. Frontal costa sulcate throughout, narrow at juncture with fastigium, then expanded slightly with the lateral carinae percurrent to clypeus, faintly convergent just below median ocellus, elsewhere nearly parallel. A decided but slightly irregular vertical carina extending from between eve and antennal socket to clypeus, flanked by depressions, those toward the cheeks becoming sulcate ventrad. Pronotum rugose with decided transverse sulci dorsad; prozona with lateral and mesozona with lateral and meso-lateral larger nodes, metazona more coarsely, thickly and generally nodulose and bluntly sub-rectangulate produced caudad with lateral margins undulate. Tegmina represented by very large, overlapping pads which leave more than half the abdomen (when in normal position) exposed, their apices broadly rounded, their surfaces very thickly and regularly supplied with longitudinal veins and a multitude of cross-veinlets, dorsal very faintly defined from lateral fields. Wings vestigial, atrophied, lying wholly beneath the tegminal pads. Supra-anal plate as broad as long, lateral margins convex then concave convergent to the acute apex; dorsal surface raised meso-proximad and including a short medio-longitudinal sulcus, the raised area extending latero-caudad as two narrow rays which gradually narrow and disappear. Styles very short and slender. Subgenital plate small, convex-conical. Caudal femora with dorsal carina of external pagina finely serrate, not as thickly or as heavily as the dorsal carina. Caudal tibiae with ten external and nine slightly longer internal spines, regularly spaced except that the three disto-internal are closer than any of the others.

<sup>&</sup>lt;sup>1</sup>This and the allotype undoubtedly came from the same locality. Both bear the number 81 over 56 on a circular label. The paratypic male is smaller, darker and more brilliantly colored and was probably secured at a different place.



AUCACRIS EUMERA-HEBARD.

Allotype: ♀; Chile. [British Museum.]

Generally similar to male, differing as follows. Size much larger. Fastigium and frontal costa broader and shallower, the latter showing stronger narrowing at dorsal extremity and just below median ocellus. Pronotum with prozona and mesozona with median carina and nodes less heavy, metazona less thickly and evenly nodulose but with a few larger scattered nodes which are longer than wide, much like those found in certain species of *Lcprus*. Tegmina separated by a brief interval and showing scarcely a trace of differentiation between the dorsal and lateral fields. Ovipositor valves small, hairy, distoexternal margins of dorsal valves very bluntly toothed, of ventral valves forming a short proximal lobe, all apices weakly

curved and not elongate.

Body and tegmina mummy brown, head, antennae and pronotum heavily but not evenly overlaid with cinnamon in type and with clay color in allotype. Cephalic and medium limbs clay color. Caudal femora with external surfaces individually bright cinnamon buff, cinnamon and dull clay color, with three bands of black dorsad, first absent latero-externally, second and third weak on external pagina and there obsolete in the female, but continued across the ventral surface heavily in all, the first and second there connected broadly and the second and third narrowly by the same color along the ventral carina; these bands also crossing the internal face but there interrupted by the ventro-internal carina; internal surface and internal half of ventral surface brazil red (very rich) in males, peach red (pinkish) in female. Caudal tibiae and tarsi light scarlet red in males, the former paling to light orange vellow proximoexternally in the paratype, much duller, carnelian red in female with external surface and tarsi dull apricot buff.

The measurements of a male paratype from Chile, taken by H. L. Elwes and belonging to the author, follow those of the type. Length of body & 24.8 and 23.2, \( \beta \) 36.8; length of pronotum \( \delta \) 9.1 and 7.2, \( \beta \) 12; greatest dorsal width of pronotum \( \delta \) 5.8 and 4.3, \( \beta \) 7.8; exposed length of tegmen \( \delta \) 9.7 and 7.2, \( \beta \) 11.7; greatest width of tegmen \( \delta \) 4.7 and 3.9, \( \beta \) 6; length of candal femur \( \delta \) 15.8 and 14.2, \( \beta \) 19; greatest

width of caudal femur 3 5.6 and 4.7, 9 5.9 mm.

## Explanation of Plate XV.

(Figures 1½ natural size.)

Aucacris cumera new species. Fig. 1 and 2.—Type. Male.

Fig. 3 and 4,—Paratype. Male.

Fig. 5 and 6,—Allotype. Female.